



Financial Code Generator User Documentation

The Financial Code Generator is a web application used for generating state financial codes for tracking state expenses related to wildfire incidents that the state has a financial interest in. The application also displays information about each fire incident from the Integrated Reporting of Wildland-Fire Information (IRWIN) service and provides some reporting capability.

Viewing Incident Information

All users of the site have access to basic incident information without needing to login. There are two separate types of financial codes: those that are generated during the fire year and may be associated with an incident from IRWIN, and codes that are specified at the beginning of the fire year.

The default page shows the list of codes generated throughout the fire year. Click on a row to view more information about individual incidents. A modal will appear that shows additional DNRC specific information as well as more information about the associated IRWIN incident if one is present. Click on the close button or outside of the modal to close it.

The other page shows the preseason admin codes. This can be accessed using the [Admin Codes](#) link on the application header bar. If there are no pre-season codes added for the year, no categories will be shown.

Requesting elevated permissions

In order to view full incident information and create new financial codes, you must login to the application and submit a request to have access.

- 1 . Login to the application using the login button to the right in the header. You will be directed to okta.loginmt.com where you can login to the application using a choice of authentication providers.
- 2 . Once logged in, go to your user profile by clicking on or hovering over your name on the header bar to the right where the login button was, then clicking on [View Profile](#) . This page shows your current application role and the permissions that you currently have.
- 3 . Click on the [Request Elevated Role](#) button and fill out your desired application role and the reason why you need access. If you have already submitted a role request, this will show the information about your pending request.

Once you have submitted a request, one of the application administrators will either approve or deny your request.



Financial Code Generation

New financial codes can be generated by logged in users with the `Primary` , `Manager` , or `Owner` application roles. This is done on the `New Code` page, which can be reached by the `New Code` link in the header menu. The link only appears when a user is logged in and has the permission to generate financial codes.

Information Gathered

For each financial code, there are two separate groups of information. The first contains details about the fire incident itself, such as its name, the state it occurred in, and the date the fire was discovered. This information is automatically populated from IRWIN, and is entered in the `IRWIN Information` section of the form.

The second set of information contains the information that is required by Montana DNRC business practices and are generated by the FCG user. This information is entered in the `Agency Information` section of the form.

Generating A New Financial Code

Before any information can be entered, the fire year of the IRWIN incident that the financial code will be generated for must be selected using the `Fire Year` dropdown box at the top of the form. Since this defaults to the current fire year, most users won't be able to change it; it will be the only option available to them. For users with the Owner role however, they can use this dropdown to select a previous fire year. This ensures that the agency information and IRWIN incidents for that year will appear as the only options in the form.

Searching and Selecting the IRWIN Incident

In the IRWIN Information section, there is a search bar that can be used to search by either the incident name or unique fire identifier. After pressing the search button, if there is only one incident that matches the given criteria, it will automatically be selected. If there is more than one result, a dialog will appear listing the search results. After a incident is selected, the search controls will disappear, and some data fields from IRWIN will be displayed in its place. If the selected incident needs to be changed, press the `Choose Another Incident` button to clear out the current selection and make the search controls appear again.

Entering Agency Information

DNRC-specific information is entered using the `Agency Information` section of the form. Here's a brief explanation of what each field should contain:

Short Description

A short title for what this financial code will be used for. This field is required to generate a financial code.

Activity Role

The activity role type that will be associated with the incident. This field is required to generate a financial code.

- **Fire Response and Support Orgs:** Fire response and support orgs are used to segregate costs related to the suppression of wildland fire incidents. A sequential SABHRS org will be assigned in the `9 0` yxxx number series. All suppression incidents will have unique IRWIN ID's and will pull information from INFORM. Examples:
 - Mutual Aid General Support
 - Direct Protection
 - Federal Support and County Assist responses
 - NRCC out of area incident response
 - NWC mobilizations
 - Severity and Staffed Station responses
- **Fire Administrative Orgs:** Fire administrative orgs are used to segregate specific costs incurred by the Fire Protection Bureau and Forestry Division Office related to non-suppression activities. A sequential SABHRS org will be assigned in the `7 1` yxxx number series. The administrative activities under this role may or may not have incident information in IRWIN that will be pulled from INFORM. Examples:
 - GACC wide cost shares for IMT Staging costs
 - NRCC Expanded Support and GMAC Support
 - FDO costs incurred in FEMA Fire Management Assistance Grant administration
 - FPB General Support to the NR GACC

	<ul style="list-style-type: none">• All Hazard Orgs:All hazard orgs are used to segregate costs related to All Hazard incidents under DES tasking, search and rescue requests and natural disaster FEMA missions. All hazard mobilizations and activities wildland fire related. The Northern Rockies Coordination Center with approval from the Fire Protection Bureau Deputy Chief of Fire Operations, will assign orgs in the 4 0 yxxx number series. All Risk incidents will have unique IRWIN ID's and will pull information from INFORM.
Area	
The DNRC area that is handling the incident.	
Unit	
The DNRC unit that is handling the incident.	
Business Action	
A specific type of business action that can be associated with an incident. This feild is required.	
Remarks	
This text box should contain any general remarks to be associated with the IRWIN incident.	



Managing Users

The actions on this page can only be completed if a user has the Manager application role or higher. These users can approve role requests, view user information, and disable users in the system.

Approving Role Requests

To approve user role requests, navigate to the Users page using the `Users` link on the header page. Next, click the `Manage Requests` link. Here you will see a list of the pending requests with the name of the requested, the requested role, and the reason for the request. Next to the request, there are two buttons labeled 'Approve' and 'Reject' that either approve or decline the request for the specific role request.

Viewing System Users

To view all users known to the system, navigate to the Users page using the `Users` link on the header page. Here you will see the display name, actual name, and role of each users that is registered with the application.



Number Management

The DNRC areas, DNRC units and activity roles that are available to be associated with financial codes can change on a yearly basis. Users with the `OWNER` application role can modify these attributes for the current and upcoming year. These settings are available in the configuration page, which can be navigated to by using the `Configuration` link in the navigation header.

The page is separated into tabs, with one tab for each of the possible configurable entities

Managing Preseason Admin Codes

The application can store and display static codes that aren't generated by the main code generation functionality. These codes can be entered under the Preseason Admin tab.

To add a preseason code, click on the add button and enter the code's name, category, and numeric code.

To add a new category, contact the system administrators with the following information:

- The name of the category
- Any descriptive text that should go along with it (limited to `300` characters).

The descriptions of each category must also be changed by the system administrators.

Managing DNRC Areas and Units

Areas and units are managed using identical interfaces.

Adding Areas or Units

To add an area or unit, find the appropriate list and click on the `Add` button underneath the list's title. Two input fields will appear to enter the new item's name and three letter abbreviation. After entering the information, it is possible to add the item for use in the current year, or use in the next year by using the `Add` or `Add for next year` buttons.

If the new item is added successfully, then the new item will be displayed at the top of the list. Otherwise, an error message will appear. Item's names and abbreviations must be unique within their group.

Disabling Areas or Units

To disable an item, find it in the appropriate list. Underneath the item's general information, there are two checkboxes. If the `Disabled for current year` checkbox is checked, the item will not be available for use in the current year. If the `Disabled for next year` box is checked, then the item will not be activated for next year or any year after that.

Managing Activity Roles

Number Templates

Number templates are used to specify how the numbers associated with an activity role are generated. Each template is a series of placeholder characters that determine what the character in the same place of the generated numbered will be. These placeholders can be resolved to the character itself, a digit of the current year, or a digit from the activity role's counter. Use the table below to see which characters in a template are tranformed when a number is generated:

Character	Description
X	Replaced by a digit from the activity role's counter
O	Replaced by a digit from the activity role's counter if there aren't enough <code>X</code> placeholders
Y	Replaced by a digit from the code's year

Characters are replaced right-to-left starting with the counter's or year's least significant digit. Any placeholder that doesn't have a digit assigned to it will be set to `0`. For example, for the template `XXX`, with a counter value of `25`, the generated value is `025`.

Placeholders do not need to be contiguous. For example, for the template `X1X` with a counter value of `36`, the generated value will be `316`.

For the placeholders `X` and `O`, if there are too many digits in the counter to encode, no result will be produced.

For the placeholder `%Y`, the year is truncated to match the number of `%Y` placeholders given. For example, with the template `%YY`, and the year `2021`, the generated value will be `21`.

The `%0` Placeholder

Unlike the `%x` placeholder, the `%0` placeholder doesn't directly place it's digits into the generated string. Instead, the digits are transformed into a base `27` number which is encoded using the digits `0`, `a`, `b`, `c`, `d`, ... `z`. This number is then placed into the template as usual.

For example, if the template `%0` needed to encode the number `11`, it would use the character `k`, as it is the `11`th letter of the alphabet. As another example, the template `%00` encodes the number `28` as `a0` and the number `30` as `ac`.

